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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Joseph J. Laks Thomson Licensing LLC 2 Independence Way, Patent Operations PO Box 5312 PRINCETON, NJ 08543			EXAMINER SAUNDERS JR, JOSEPH	
			ART UNIT 2615	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/541,577

Applicant(s)

TAZINE ET AL.

Examiner

Joseph Saunders

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10-11-05, 7-6-05</u> | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This is the initial office action based on the communications filed July 6, 2005.

Claims 1 – 18 are currently pending and considered below.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 17 recites the limitation "audio thumbnail" in the second indentation. There is insufficient antecedent basis for this limitation in the claim. It appears that by referencing "currently selected" the Applicant appears to be referring to the "audio representation" when later stating "audio thumbnail" and therefore will be examined accordingly.

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 2, 5 – 9, 13, and 16 – 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Platt (US 6,987,221), hereinafter Platt.

**Claim 1:** Platt discloses a method for creating and accessing a menu for audio content (playlist, Column 1 Lines 52 – 58) stored in a storage means (media database 106, also represented by disk storage 1524), the content consisting of audio tracks ("media such as, but not limited to, audio (e.g., songs)," Column 4 Lines 12 – 36), and the menu containing representations of said audio tracks (Figure 4 and Column 6 Lines 62 – 67), the method comprising:

- classifying the audio tracks into groups, or clusters wherein said classification is performed according to characteristic parameters (Figure 3) of said audio tracks ("When the add button 450 is clicked, a playlist is then generated that fits or is similar to the selected song which is now referred to as a seed item and the selected song being added to the beginning of the playlist," Column 6 Lines 42 – 46);
- selecting automatically an audio track being a representative for the cluster, wherein said selection is performed according to characteristic parameters of said audio track and of the other audio tracks of said cluster ("items or tracks are sorted according to their respective similarity values" as a result "the desirable seed items, by virtue of necessarily being more similar, are inserted at the beginning of the playlist at 116," and therefore the track appearing first in the playlist has been automatically selected to

represent the playlist since the more similar songs appear first and “a user would likely prefer to hear the more similar songs first”, Column 13 Lines 33 – 43);

-generating as said representation a reproducible audio extract from said representative audio track (All tracks including the representative audio track has a “preview or short version of the selected track (e.g., playing 10 seconds of a song 30 seconds into the song),” Figure 4 and Column 6 Lines 62 – 67); and

-associating said audio extract to a menu list (Figure 4).

**Claim 2:** Platt discloses the method according to claim 1, and further discloses wherein said characteristic parameters used for classification of audio content comprise one or more audio descriptors, the audio descriptors being either physical features, or perceptual features, or psychological or social features of the audio content (Figure 3).

**Claim 5:** Platt discloses the method according claim 1, and further discloses wherein a user can modify the result of automatic classification of audio tracks (Column 4 Lines 37 – 50).

**Claim 6:** Platt discloses the method according claim 1, and further discloses wherein a user can modify the classification rules for automatic classification of audio tracks (Classification rules are established by seed items and therefore by choosing different seed items for different playlists the user is modifying the classification rules for the

automatic classification of audio tracks into playlists, see for example Column 6 Lines 42 – 46).

**Claim 7:** Platt discloses the method according to claim 1, and further discloses wherein the actual audio data are clustered within said storage means according to said menu (Playlists are created via user interface 400 of Figure 4 and stored in media database 106, also represented by disk storage 1524).

**Claim 8:** Platt discloses the method according to claim 1, and further discloses wherein the audio extract is a sample from the audio track, or an audio sequence being synthesized from the actual audio track (“preview or short version of the selected track (All tracks including the representative audio track has a “preview or short version of the selected track (e.g., playing 10 seconds of a song 30 seconds into the song),” Figure 4 and Column 6 Lines 62 – 67).

**Claim 9:** Platt discloses the method according to claim 1, and further discloses wherein audio extracts are created additionally for audio tracks not being representatives of clusters (All tracks including the representative audio track has a “preview or short version of the selected track (e.g., playing 10 seconds of a song 30 seconds into the song),” Figure 4 and Column 6 Lines 62 – 67).

**Claim 13:** Platt discloses the method according to claim 1, and further discloses wherein the classification rules are modified automatically if a defined precondition is detected, and a reclassification may be performed ("Additional tracks can be removed and other tracks added, therein causing the playlist to be regenerated, until the playlist is acceptable (e.g., a user is happy with it)," Column 7 Lines 13 – 16).

**Claim 16:** Platt discloses an apparatus (Figure 15 and Column 15 Line 45 – Column 18 Line 37) for creating or accessing a menu for audio content (playlist, Column 1 Lines 52 – 58) stored on a storage means (media database 106, also represented by disk storage 1524), the content consisting of audio tracks ("media such as, but not limited to, audio (e.g., songs)," Column 4 Lines 12 – 36), and the menu containing representations of audio tracks (Figure 4 and Column 6 Lines 62 – 67), the apparatus comprising

- means for automatically classifying the audio tracks into groups, or clusters wherein said classification is performed according to characteristic parameters (Figure 3) of said audio tracks ("When the add button 450 is clicked, a playlist is then generated that fits or is similar to the selected song which is now referred to as a seed item and the selected song being added to the beginning of the playlist," Column 6 Lines 42 – 46);
- means for automatically selecting an audio track being a representative for the cluster, wherein said selection is performed according to characteristic parameters of said audio track and of the other audio tracks of said cluster ("items or tracks are sorted according to their respective similarity values" as a result "the desirable seed items, by virtue of necessarily being more similar, are inserted at the beginning of the playlist at 116," and

therefore the track appearing first in the playlist has been automatically selected to represent the playlist since the more similar songs appear first and “a user would likely prefer to hear the more similar songs first”, Column 13 Lines 33 – 43);

-means for generating a reproducible audio extract from said representative audio track (All tracks including the representative audio track has a “preview or short version of the selected track (e.g., playing 10 seconds of a song 30 seconds into the song),” Figure 4 and Column 6 Lines 62 – 67); and

-means for associating said audio extract to a menu list (Figure 4).

**Claim 17:** Platt discloses the apparatus according to claim 16, further comprising

-means for selecting and reproducing a first audio representation from a first cluster (“a play button 460 can be activated (e.g., by clicking) to cause the current playlist to be played,” Column 7 Lines 37 – 50);

-means for a first user input the input controlling whether the cluster associated with the currently selected audio thumbnail is selected or not (clear button 465); and means for a second user input the input controlling whether another cluster is selected or not (“open button”).

**Claim 18:** Platt discloses the apparatus according to claim 16, further characterized in that an audio track of the selected cluster is read from said storage means for playback (“a play button 460 can be activated (e.g., by clicking) to cause the current playlist to be



played," Column 7 Lines 37 – 50 and therefore an audio track is played back from the media database or storage device).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3, 4, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Platt.

**Claim 3:** Platt discloses the method according to claim 1, but does not explicitly teach whether or not an audio track can be classified into more than one cluster. However, since the tracks are placed in the playlist based upon the results of a vector which is based upon multiple attributes of the item (Column 10 Lines 9 – 48). It would have been obvious to one of ordinary skill in the art that when generating multiple playlists as disclosed by Platt that the system of Platt may decide that a song may have the minimum required attributes necessary to match more than one playlist category and therefore be classified in more than one playlist. Since excluding songs from being in more than one playlist would be disadvantages to the user, since the user wants the best matching songs in each playlist.

**Claim 4:** Platt discloses the method according to claim 1, and further discloses wherein the audio tracks within a cluster (playlist) have variable order, but then adds the step of sorting since "a user would likely prefer to hear the more similar songs first," Column 13 Lines 35 - 43, and therefore does not disclose allowing the user to listen to a randomly selected track when having selected a cluster, with said track belonging to said cluster. However, it therefore would have been obvious to one of ordinary skill in the art at the time of the invention that even while the playlist may be sorted to determine the most representative track it may be desirable to playback the tracks in the original random order as disclosed by Platt thereby satisfying the user in the case of the user not preferring to listen to songs sorted by similarity ranking.

**Claim 11:** Platt discloses the method according to claim 1, but does not explicitly state wherein one of said clusters has no representative track. However, Platt does not disclose how to determine the order among seed items when more than one seed item is selected. And therefore while one of ordinary skill in the art may consider any one of the seed items in this case to be the representative track, it would also have been obvious to one of ordinary skill in the art at the time of the invention that a representative track does not exist since a determination cannot be made among seed items.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Platt in view of Kraft et al. (US 6,225,546), hereinafter Kraft.

**Claim 10:** Platt discloses the method according to claim 1, but does not disclose wherein the length of audio extracts is not predetermined. Kraft discloses also discloses a method of generating an audio summary of a musical piece and teaches that instead of playing "10 seconds of a song 30 seconds into the song" as disclosed by Platt, it is beneficial to analyze the piece to determine the main melody and "once the main melody is detected, the segment of the musical data containing the main melody is provided in one or more format," Abstract. Since the main melody is different lengths in different songs, the length of the audio summary is not predetermined but determined from the examination of the musical piece. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the method as disclosed by Kraft in the invention of Platt allowing, thereby allowing for more relevant and recognizable summaries.

9. Claims 12, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Platt in view of Mercer et al. (US 7,043,477), hereinafter Mercer.

**Claim 12:** Platt discloses the method according to claim 1, but does not disclose wherein said menu is hierarchical, such that a cluster (playlist) may contain one or more subclusters (subplaylists). Mercer discloses a similar menu interface and illustrates in Figure 7 that a playlists can be hierarchical. For example, "Playlists" is further broken down into "Party" and "Christmas". Therefore since it is well known in the art at the time

of the invention to provide hierarchical playlists, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the hierarchical data structure taught by Mercer in the invention of Platt thereby allowing for further segmentation.

**Claims 14 and 15:** Platt discloses the method according to claim 13, but does not disclose wherein said precondition comprises that the difference between the number of tracks in a cluster and the number of tracks in another cluster reaches a maximum limit value, and wherein said precondition comprises that all stored tracks were classified into one cluster, and the total number of tracks reaches a maximum limit value. Mercer discloses where bounds are set when determining the size of playlists (Column 8 Line 40 - Column 9 Line 62). Therefore, it would have been obvious to one of ordinary skill in the art given the teaching of Mercer to incorporate a limit between two playlists or a single playlist in the invention of Platt to determine how classification is performed, thereby allowing for example "If composer information is available for some of the selected media files (e.g., "if greater than twenty-five percent), the authoring software creates a menu 'Composer' ..." thereby further automating the classification process.

### ***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Saunders whose telephone number is (571)

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270-1063. The examiner can normally be reached on Monday - Thursday, 9:00 a.m. - 4:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571) 272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



JS  
February 18, 2008



**SINH TRAN**  
**SUPERVISORY PATENT EXAMINER**